REMARKS

Claims 41-55, 59-87 and 89-91 are active. Claims 12-23 and 25-30 have been withdrawn from consideration. Claims 41 and 46 now add a "wherein clause" which further characterizes the recited polypeptide as containing arginine at the position corresponding to position 43 in SEQ ID NO: 4. Support for this amendment is found in the specification on page 11, lines 29-31. Claims 56-58 which recited polypeptides having residues other than arginine at position 43 have been cancelled. Claims 89-91 have been amended as discussed to clarity the scope of the claimed fragments. Accordingly, the Applicants do not believe that any new matter has been introduced.

The Applicants thank Examiner Hutson for the helpful and courteous interview of October 26, 2004. The claim language amendments above were discussed as possible ways of addressing the rejections of record. It was suggested that the Applicants direct the claims to polynucleotide which encode polypeptides having arginine at the position corresponding to position 43, because the specification exemplifies the improved activity of such polypeptides in producing lysine. It was suggested that Claims 88-91 be directed to fragments of SEQ ID NO: 1 to clarify the scope of these claims.

RESTRICTION

The Applicants note that the Restriction Requirement has been made Final. Claims 12-23 and 25-30 have been withdrawn from consideration. The Applicants respectfully request that these claims be rejoined upon an indication of allowability for the claims of the elected group, see M.P.E.P. § 821.04.

13

Rejection – 35 U.S.C. § 112, first paragraph

Claims 88-91 were rejected under 35 U.S.C. § 112, first paragraph as lacking adequate description. The Applicants submit that this rejection is moot in view of the revision of these claims.

Rejection – 35 U.S.C. § 112, first paragraph

Claims 41-46, 48, 49, 51-53, 55, 59-76 and 88-91 were rejected under 35 U.S.C. § 112, first paragraph, as lacking adequate enablement. As discussed, Claims 41 and 45 are directed to polypeptides which have an arginine residue at the position corresponding to residue 43. This amino acid exchange is described at the bottom of page 11 of the specification and exemplified as rpsL-1545 (see the top of page 12 of the specification). Strains containing rpsL-1545 produce higher levels of the amino acid lysine, see page 24 (Table 1) of the specification.

With respect to Claims 88-91, while the claimed fragments are not limited to fragments which express functional proteins, the specification clearly indicates that they may be used as primers or probes, see e.g., page 5, lines 9-17 for producing or identifying useful genes like rpsL-1545.

Accordingly, the Applicants submit that this rejection may now be withdrawn.

Rejection - 35 U.S.C. § 102(a)

Claims 88-91 were rejected under 35 U.S.C. § 102(a) as being anticipated by Nakagawa ("Satochi et al."), EP 1 108 790, (Ref. AP). The Applicants submit that this rejection is most in view of the above amendment which indicates that the fragments are fragments of SEQ ID NO: 1.

Application No. 10/075,460 Reply to Office Action of August 31, 2004

CONCLUSION

In view of the above amendments and remarks, the Applicants respectfully submit that this application is now in condition for allowance. Early notification to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C. Norman F. Oblon

Customer Number

22850

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 08/03) Thomas M. Cunningham, Ph.D.

Registration No. 45,394